

PASTAN and CHOWDHURY
Application No.: 09/581,345
Page 5

PATENT

163. (Amended) A kit of claim 162, wherein said V_H and V_L chains of said antibody have the sequence set forth in Figure 1 (SEQ ID NO:5).

164

164. (Amended) A kit of claim 162, wherein said antibody is a scFv.

165. (Amended) A kit of claim 164, wherein said scFv has the sequence set forth in SEQ ID NO:5.

REMARKS

I. Status of the claims

Claims 113-121 and 123-165 are pending, with claim 122 having been canceled by the present amendment.

II. The Telephone Interview

Applicants thank the Examiner for the courtesy extended in the telephone interview held November 21, 2002. The amendments below reflect the corrections and amendments agreed to with the Examiner in the interview.

III. The Amendments Herein

No new matter has been added by the amendments herein.

A number of claims have been amended to add SEQ ID NO:5 after the reference to Figure 1 to serve as an additional guide to the practitioner. Applicants note that the sequence listing submitted August 3, 2001, contained a correction to SEQ ID NO:5 as compared to Figure 1 (SEQ ID NO:5 has leucine at position 21, whereas Figure 1 incorrectly shows an isoleucine.) See, August 3, 2001, Communication at page 3. For clarity, Applicants note that the references to Figure 1 in the claims as amended herein

PASTAN and CHOWDHURY
Application No.: 09/581,345
Page 6

PATENT

refer to Figure 1 as corrected to show the leucine at position 21. Applicants will submit the corrected Figure 1 upon an indication that the claims are in condition for allowance.

References to the peptide linker as shown in Figure 1 have been amended to refer to SEQ ID NO:6, which sets forth the sequence of the linker. The phrase "a sequence as shown in Figure 1" has been amended to "the sequence shown in Figure 1" to improve the precision of the claims. The term "isolated" has been added to claims 113, 135, and 140.

Claim 120 has been amended to refer to appropriate positions at which a cysteine can be introduced to permit disulfide bonding between the V_L and V_H chains. Support for the amendment is found at page 8, lines 24-5, which incorporates by reference co-owned application 08/077,252. A divisional of the '252 application issued as U.S. Patent No. 6,147,203. The language introduced into claim 120 is from the claims of the '203 patent, which are supported by the '252 application as filed. The language introduced into claim 120 is therefore fully supported by the '252 application. As incorporated text, the '252 application is considered to be part of the current application as filed, and therefore fully supports the present amendments. The remaining amendments correct typographical errors.

Finally, claim 122 has been cancelled as duplicative of claim 118 as amended.

PASTAN and CHOWDHURY
Application No.: 09/581,345
Page 7

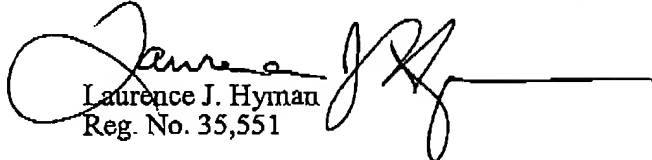
PATENT

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, he is invited to telephone the undersigned at 415-576-0200.

Respectfully submitted,


Laurence J. Hyman
Reg. No. 35,551

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: (415) 576-0200
Fax: (415) 576-0300
LJH:pja

PASTAN and CHOWDHURY
Application No.: 09/581,345
Page 8

PATENT

MARKED UP VERSION SHOWING CHANGES

113. (Amended) An isolated antibody comprising a variable heavy (V_H) chain and a variable light (" V_L ") chain, which V_H and V_L chains have complementarity-determining regions ("CDRs") as set forth in Figure 1 (SEQ ID NO:5).

114. (Amended) An antibody of claim 113, wherein said V_H and V_L chains comprise framework regions ("FRs") as set forth in Figure 1 (SEQ ID NO:5).

115. (Amended) An antibody of claim 113, wherein said antibody is a single chain Fv ("scF[V]v").

117. (Amended) An antibody of claim 116, wherein said peptide linker has [a] the sequence of SEQ ID NO: 6 [as shown in Figure 1].

118. (Amended) An scFv of claim 115, wherein said scFv has [a] the sequence [as] shown in Figure 1 (SEQ ID NO:5).

120. (Amended) A dsFv of claim 119, having [V_H and V_L chains which comprise framework regions ("FRs") as shown in Figure 1] a V_L chain containing a cysteine at position 42, 43, 44, 45, 46, 98, 99, 100, or 101, such positions being determined in accordance with the numbering scheme published by Kabat and Wu, and a V_H chain containing a cysteine at position 43, 44, 45, 46, 47, 103, 104, 105 or 106, such positions being determined in accordance with the numbering scheme published by Kabat and Wu.

121. (Amended) An antibody of claim 113, wherein said V_H and V_L chains are encoded by SEQ ID NO[I]:1.

PASTAN and CHOWDHURY
Application No.: 09/581,345
Page 9

PATENT

135. (Amended) An isolated antibody comprising a variable heavy ("V_H") chain which V_H chain has complementarity-determining regions as set forth in Figure 1 (SEQ ID NO:5).

136. (Amended) An antibody of claim 135, wherein said V_H chain has [a] the sequence [as] set forth in Figure 1 (SEQ ID NO:5).

140. (Amended) An isolated antibody comprising a variable light ("V_L") chain which V_L chain has complementarity-determining regions as set forth in Figure 1 (SEQ ID NO:5).

141. (Amended) An antibody of claim 140, wherein said V_L chain has [a] the sequence as set forth in Figure 1 (SEQ ID NO:5).

145. (Amended) A composition comprising a pharmaceutically acceptable carrier and an immunoconjugate which comprises a therapeutic agent or a detectable label attached or fused to an anti-mesothelin antibody comprising a variable heavy ("V_H") chain and a variable light ("V_L") chain, which V_H and V_L chains have complementarity-determining regions ("CDRs") as set forth in Figure 1 (SEQ ID NO:5).

146. (Amended) A composition of claim 145, wherein said V_H and V_L chains comprise framework regions ("FRs") as shown in Figure 1 (SEQ ID NO:5).

147. (Amended) A composition of claim 145, wherein said antibody is a single chain Fv ("scFv").

149. (Amended) A composition of claim 145, wherein said peptide linker has [a sequence as shown in Figure 1] the sequence of SEQ ID NO:6.

PASTAN and CHOWDHURY
Application No.: 09/581,345
Page 10

PATENT

150. (Amended) A composition of claim 147, wherein said scFv has [a] the sequence [as] shown in Figure 1 (SEQ ID NO:5).

154. (Amended) A composition comprising a pharmaceutically acceptable carrier and an immunoconjugate which comprises a therapeutic agent or a detectable label attached or fused to an anti-mesothelin antibody comprising a variable heavy ("V_H") chain having complementarity-determining regions ("CDRs") as set forth in Figure 1 (SEQ ID NO:5).

155. (Amended) A composition of claim 154, wherein said V_H chain comprises framework regions ("FRs") as set forth in Figure 1 (SEQ ID NO:5).

158. (Amended) A composition comprising a pharmaceutically acceptable carrier and an immunoconjugate which comprises a therapeutic agent or a detectable label attached or fused to an anti-mesothelin antibody comprising a variable light [("V_L")] ("V_L") chain having complementarity-determining regions ("CDRs") as set forth in Figure 1.

159. (Amended) A composition of claim 158, wherein said V_L chain comprises framework regions ("FRs") as set forth in Figure 1 (SEQ ID NO:5).

162. (Amended) A kit for detecting mesothelin on the surface of cells, said kit comprising:

(i) anti-mesothelin antibody comprising a variable heavy (V_H) chain and a variable light ("V_L") chain, which V_H and V_L chains have complementarity-determining regions ("CDRs") as set forth in Figure 1[.]; and

(ii) instructions printed on a tangible medium, said instructions describing methods of using [and] said antibody for detecting mesothelin on the surface of cells.

PASTAN and CHOWDHURY
Application No.: 09/581,345
Page 11

PATENT

163. (Amended) A kit of claim 162, wherein said V_H and V_L chains of said antibody have [a] the sequence [as] set forth in Figure 1 (SEQ ID NO:5).

165. (Amended) A kit of claim 164, wherein said scFv has [a] the sequence [as] set forth in SEQ ID NO:5.

SF 1408638 v1